

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/619,303	TAMAKI ET AL.	
	Examiner James A. Menefee	Art Unit 2828	

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to amendment filed 7/11/2005.
  2.  The allowed claim(s) is/are 1-5.
  3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a)  All    b)  Some\*    c)  None    of the:
      1.  Certified copies of the priority documents have been received.
      2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
- Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**
4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
    - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 4/7/2005.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
  6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

In response to the amendment filed 7/11/2005, claims 1-2 are amended. Claims 1-5 are pending.

### ***Drawings***

Figures 3 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

The applicant in the amendment merely stated "Label Figures 3& 4 'PRIOR ART.'" The Patent Office does not make drawing changes, and applicant must submit replacement sheets in compliance with 37 CFR 1.121(d) as noted below. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. The objection to the drawings will not be held in abeyance.

## **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

### ***Allowable Subject Matter***

Claims 1-5 are allowed. The following is an examiner's statement of reasons for allowance:

There is not taught or disclosed in the prior art a laser resonator as claimed including a pair of optical systems in the location as claimed for changing the state of the laser in the laser medium, and a pair of movement portions for moving the optical systems along the optical axis of the laser.

It should be noted that the broadest reasonable interpretation of "changing the state of the laser in said laser medium" in light of the specification encompasses only a compensation for thermal lensing. Applicant's entire disclosure is drawn only toward the optical systems

compensating for thermal lensing; there is nothing to suggest that this “changing the state” can encompass any other change. Additionally, see applicant’s discussion of “changing the state” with regards to Fig. 2 (changing the state compensates for thermal lensing).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

#### *Response to Arguments*

Applicant's arguments filed 7/11/2005 have been fully considered and are persuasive. Particularly, applicant's arguments are persuasive in that the previously cited references to Plaessmann and Scott only correct for thermal lensing in optical amplifiers, an entirely different issue from the present claims relating to lensing in a laser resonator.

#### *Comment on Other References*

The examiner would like to comment on other prior art that, while relevant, cannot be used to reject the claims.

LaPlante et al. (US 5,757,842), cited previously, discloses a similar thermal lens compensated resonator, however the optical systems may only be translated across the optical axis, not along it as claimed. This is a necessary feature of LaPlante and it does not appear it may be modified.

Other references cited previously, Yasui et al. (US 5,892,789) and Caprara et al. (US 5,912,912), disclose translation of optical systems to compensate for thermal lensing, however there is no suggestion of the claimed configuration. Yasui's pair is only on one side of the lasing medium and therefore cannot be located between "said laser medium and said pair of reflecting portions respectively." Caprara discloses only one translatable optical system, and the examiner withdraws any attempt at using the obvious duplication of parts case law of the prior action.

Numerous references, see, e.g., Okuyama et al. (US 5,200,965), disclose tilting or translation of the resonator reflectors, but this cannot be "between said laser medium and said pair of reflection portions" since the resonator reflectors *are* the reflection portions.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Menefee whose telephone number is (571) 272-1944. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James Menefee  
September 13, 2005



MINSUN OH HARVEY  
PRIMARY EXAMINER